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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
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2165

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/675,699

Applicant(s)

MCMULLAN ET AL.

Examiner

Tony Mahmoudi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-9,11,14,15,17 and 18 is/are rejected.
- 7) ☒ Claim(s) 3,4,10,12,13 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 28-April-2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. In view of the Appeal Brief filed on 11-April-2005, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Claims 1-18 are presently pending in the application, of which, claims 1 and 15 are presented in independent form.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 5-9, 11, 14-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusuda et al (U.S. Patent. No. 6,567,848 B1) in view of Erickson et al (U.S. Patent No. 6,412,009.)

As to claim 1, Kusuda et al teaches a computer system (see Abstract) comprising:

a first computer network (see figure 3A);

a first computer subsystem (see 140, 142, 144 and 146, figure 3A) comprising collaborative application software (see 113, figure 3B), with the collaborative application software comprising machine readable instructions (see column 6, lines 41-52) for sending application output data over the computer network (see figure 3A where application output data is sent over the network 131);

a second computer subsystem structured to receive the application output data (see 160 and 162, figure 3A and see column 16, lines 12-18); and

a second-subsystem firewall, located in front of the second application subsystem, the second-subsystem firewall structured to communicate the application output data to the second computer subsystem (see 133, figure 3A, see column 10, lines 54-67, and see column 13, lines 8-16) through a hypertext transfer protocol (see column 13, lines 29-57.)

Kusuda et al does not teach a keep-alive connection that is kept open for the duration of a collaboration.

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches a keep-alive connection that is kept open for the duration of a collaboration (see column 8, line 32 though column 9, line 24.)

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Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Kusuda et al to include a keep-alive connection that is kept open for the duration of a collaboration.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Kusuda et al by the teaching of Erickson et al, because a keep-alive connection that is kept open for the duration of a collaboration, would enable the system to keep the connection active/alive even during periods of inactivity, as taught by Erickson et al (see column 9, lines 17-19.)

As to claim 2, Kusuda et al as modified teaches wherein the computer system further comprises communication software (see Kusuda et al, column 5, lines 30-33) comprising machine readable instructions (see column 5, line 66 through column 6, line 6) for opening a first-subsystem thread in the second computer subsystem for receiving the application output data (see Kusuda et al, column 6, lines 7-16, where “opening a first-subsystem thread in the second computer subsystem” is read on “requesting connection to the second information terminal”).)

As to claim 5, Kusuda et al as modified teaches wherein the collaborative application software sends the application output data as a stateful communication (see Erickson et al, Abstract; column 1, lines 5-10; and see column 2, lines 41-59, where “stateful” is read on “persistent”).)

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As to claims 6 and 18, Kusuda et al as modified teaches the application output data is structured and arranged according to an HTTP protocol (see Kusuda et al, column 13, lines 29-57.)

Kusuda et al as modified still does not teach an HTTP 1.1 protocol.

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches an HTTP 1.1 protocol (see column 6, lines 14-18, and see column 7, lines 3-13.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Kusuda et al as modified, to include an HTTP 1.1 protocol.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Kusuda et al as modified, by the teaching of Erickson et al, because “a newer” HTTP 1.1 protocol, would provide a persistent, “keep-alive mechanism that allows one connection for multiple objects on an HTML page”, as taught by Erickson et al (see column 2, lines 10-19.)

As to claims 7 and 17, Kusuda et al as modified still does not teach wherein:
the second-subsystem firewall comprises a port 80; and
the application output data is communicated across the second-subsystem firewall through a connection originated through port 80.

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches:
the second-subsystem firewall comprises a port 80 (see figure 3, port 130); and

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the application output data is communicated across the second-subsystem firewall through a connection originated through port 80 (see column 5, line 47 through column 6, line 3.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Kusuda et al as modified, to include the second-subsystem firewall comprises a port 80; and the application output data is communicated across the second-subsystem firewall through a connection originated through port 80.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Kusuda et al as modified, by the teaching of Erickson et al, because including the second-subsystem firewall comprises a port 80; and the application output data is communicated across the second-subsystem firewall through a connection originated through port 80, would prevent making additional holes in firewalls as taught by Erickson et al (see column 5, lines 60-62.)

As to claim 8, Kusuda et al as modified teaches wherein the first computer subsystem (see Kusuda et al, 142 in figure 3A) comprises:

- a server computer (see Kusuda et al, 145 in figure 3A);
- a Web server computer (see Kusuda et al, 143 in figure 3A), and
- a second computer network structured to allow data communication between the server computer and the Web server computer (see Kusuda et al, 147 and 149 in figure 3A form a

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computer network managing communications between server computer 145 and web server computer 143.)

As to claim 9, Kusuda et al as modified teaches wherein:

the server computer comprises at least a portion of the collaborative applications software (see Kusuda et al, 142 in figure 3A); and

the Web server computer (see Kusuda et al, 143 in figure 3A) is structured to receive the application output data from the server computer over the second computer network and to send the application output data to the second computer subsystem over the first computer network (see Kusuda et al, figure 3A.)

As to claim 11, Kusuda et al as modified teaches the system further comprising:

a third computer subsystem structured to receive the application output data (see Kusuda et al, 170, 172 and 174 in figure 3B); and

a third-subsystem firewall, located in front of the third computer subsystem the third subsystem firewall structured to communicate the application output data to the third computer subsystem through a hypertext transfer protocol (see Kusuda et al, the firewall in front of the systems 170, 172 and 174) keep-alive connection (see Erickson et al, column 8, line 32 though column 9, line 24.)

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As to claim 14, Kusuda et al as modified teaches wherein the collaborative application software (see Kusuda et al, 113 in figure 3B) comprises at least one of the following functions: a word processor, a task scheduling tool, a graphics program, a presentation program, a spreadsheet, a game, a music studio (see Kusuda et al, column 9, lines 9-24 and see column 10, lines 15-22.)

As to claim 15, Kusuda et al teaches a method of communicating over a computer network (see Abstract), the method comprising the steps of:

generating, by a collaborative application software residing on a server computer, an application output communication (see 113, figure 3B, and see column 19, lines 39-45);

sending, over a first computer network, the application output communication to a client firewall (see figure 3A);

communicating the application output communication (see 133, figure 3A, see column 10, lines 54-67, and see column 13, lines 8-16) across the client firewall (see 133 in figure 3A) through a hypertext transfer protocol (see column 13, lines 29-57); and

receiving the application output data at a client computer (see 160 and 162, figure 3A and see column 16, lines 12-18.)

Kusuda et al does not teach a keep alive connection; and keeping the hypertext transfer protocol keep-alive connection for the duration of a collaboration.

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches a keep-alive connection that is kept open for the duration of a collaboration (see column 8, line 32 though column 9, line 24.)

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Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Kusuda et al to include a keep-alive connection that is kept open for the duration of a collaboration.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Kusuda et al by the teaching of Erickson et al, because a keep-alive connection that is kept open for the duration of a collaboration, would enable the system to keep the connection active/alive even during periods of inactivity, as taught by Erickson et al (see column 9, lines 17-19.)

Allowable Subject Matter

5. Claims 3-4, 10, 12-13, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, Kusuda et al (U.S. Patent. No. 6,567,848 B1), Erickson et al (U.S. Patent No. 6,412,009), and Perkowski (U.S. Publication No. 2003/0139975), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

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wherein the second computer subsystem comprises a second-subsystem socket structured to receive the application output data; and

the communication software further comprises machine readable instructions for causing the second-subsystem socket to block on a read, as recited in dependent claim 3.

Claim 4 is objected to as being dependent from the objected to dependent claim 3.

wherein the Web server computer comprises a Web server socket structured to receive the application output data from the server computer over the second computer network; and

the communication software further comprises machine readable instructions for causing the Web server socket to block on a read, as recited in dependent claim 10.

Wherein the third computer subsystem comprises a third-subsystem socket structured to receive the application output data; and

the communication software further comprises machine readable instructions for causing the third-subsystem socket to block on a read, as recited in dependent claim 12.

Claim 13 is objected to as being dependent from the objected to dependent claim 12.

wherein the client computer blocks on a read when waiting for and receiving the application output data, as recited in claim 16.

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Response to Arguments

7. Applicant's arguments filed on 11-April-2005 with respect to the rejected claims in view of the cited references have been fully considered but they are moot in view of the new grounds of rejection.

Conclusion

8. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (571) 272-4078. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

tm

June 16, 2005

C. Rones
CHARLES RONES
Supervisory PRIMARY EXAMINER